Issuance Date: May 22, 2006 Effective Date: July 1, 2006 Expiration Date: May 21, 2011

### STATE WASTE DISCHARGE PERMIT NUMBER ST 5213

# STATE OF WASHINGTON DEPARTMENT OF ECOLOGY Eastern Regional Office

In compliance with the provisions of the State of Washington Water Pollution Control Law Chapter 90.48 Revised Code of Washington, as amended, authorizes

Basic American Foods, Inc,538 Potato Frontage RoadMoses Lake, WA 98837

to discharge wastewater in accordance with the special and general conditions which follow.

<u>Facility Location</u>: South of Interstate 90; adjacent to State Highway 17 and along

Potato Frontage Road.

<u>Discharge Location</u>: 2300 acres located approximately 3 miles S-SE of Moses Lake (Grant Co.), in Sec. 11, 14, 15, 22, and 23, T.

18N, R. 28 EWM

<u>Industry Type</u>: Potato processing Latitude: 47° 03′ 34″ N

Longitude: 119° 15' 51" W

SIC Code: 2034

James M. Bellatty Water Quality Section Manager Eastern Regional Office Washington State Department of Ecology

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# SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A.	Discharge Monitoring Report	Monthly	August 15, 2006
S3.G	Soluble BOD test reporting	1/permit cycle	March 25, 2008
S4.A.	Operations and Maintenance Manual	Conditional	
S4.E	Flow Measurement – I/C Fields	1/permit cycle	July 1, 2006
S5.C.	Solid Waste Control Plan - Updates	Conditional	
S6.	Spill Plan - Update	1/ permit cycle	January 25, 2007
S7.	Irrigation and Crop Management Plan	1/year	April 1, 2006
S8.	Vadose Zone Monitoring Plan	1/permit cycle	December 1, 2006
G7.	Application for permit renewal	1/permit cycle	November 22, 2010

# SPECIAL CONDITIONS

### S1. DISCHARGE LIMITATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to apply wastewater to land via spray irrigation not to exceed the agronomic rates, for nitrogen and water, and at rates for other wastewater constituents that are protective of the background ground water quality.

The Permittee is authorized to apply wastewater for final treatment on the following designated irrigation lands:

2300 acres located approximately three miles SW of the processing facility in: Sec. 11, 14, 15, 22, and 23, T. 18N., R. 28 EWM.

The annual average daily flow from the processing facility to the sprayfields shall not exceed 1.42 MGD and the maximum daily flow shall not exceed 1.66 MGD. The total annual flow from the processing facility shall not exceed 520 MG.

Loading to the sprayfields shall not exceed:

Total annual (gross) nitrogen load to all fields: 477,000 lbsTotal annual BOD<sub>5</sub> load to BAF fields:  $32.7 \times 10^6 \text{ lbs}$ 

The sprayfield system must be operated by the Permittee so as to protect the existing and future beneficial uses of the ground water and not cause a violation of the ground water standards (WAC 173-200).

# **S2.** MONITORING REQUIREMENTS

#### A. Irrigated Process Wastewater Monitoring

The sampling point for the process wastewater being irrigated onto the sprayfields shall be after screening and at a point that is representative of what is being spray irrigated.

The Permittee shall	monitor the	wastewater	according to	the following	schedule:
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Parameter	Units	Sampling Frequency	Sample Type
Flow (avg daily; total monthly; total annual)	MGD/MG	Continuous <sup>1</sup>	meter
pH (max and min.)	s.u.	1/ week	grab
Total BOD <sub>5</sub> (daily; total annual)	mg/L; lbs/day; lbs	1/ month	24hr composite
Soluble BOD <sub>5</sub> <sup>2</sup> (daily)	mg/L; lbs/day	1/ month <sup>3</sup>	24hr composite
Total Nitrogen-N <sup>4</sup> (daily; total annual)	mg/L; lbs/day; lbs	1/ month	24hr composite
NH <sub>3</sub> -N	mg/L; lbs/day	1/ month	24hr composite
Fixed Dissolved Solids	mg/L; lbs/day	1/ month	24hr composite
Sodium	mg/L; lbs/day	2/ year <sup>5</sup>	24hr composite
Calcium	mg/L; lbs/day	2/ year <sup>5</sup>	24hr composite
Magnesium	mg/L; lbs/day	2/ year <sup>5</sup>	24hr composite
Potassium	mg/L; lbs/day	2/ year <sup>5</sup>	24hr composite
Chloride	mg/L; lbs/day	2/ year <sup>5</sup>	24hr composite
Sulfate	mg/L; lbs/day	2/ year <sup>5</sup>	24hr composite
Total Phosphate	mg/L; lbs/day	2/ year <sup>5</sup>	24hr composite
Bicarbonate	mg/L; lbs/day	2/ year <sup>5</sup>	24hr composite

<sup>&</sup>lt;sup>1</sup>Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken daily when continuous monitoring is not possible.

# B. Fresh Irrigation Water Monitoring

Representative samples will be collected from each of the 17 irrigation wells at the sprayfield site. The Permittee shall test the water from each well according to the following schedule. The results of the testing shall be reported in the Irrigation and Crop Management Plan (Section S8)

<sup>&</sup>lt;sup>2</sup> Filter sample through at least a 1.2 um filter prior to conducting the test

<sup>&</sup>lt;sup>3</sup> Testing will be done for 18 consecutive months, beginning in July 2006. See Section S3.G for reporting requirements.

<sup>&</sup>lt;sup>4</sup> Total Nitrogen = TKN

<sup>&</sup>lt;sup>5</sup> 2/year means March and September.

Parameter	Units	Sampling Frequency	Sample Type
рН	s.u.	Once <sup>1</sup>	Grab
Ammonia (as N)	mg/L	Once <sup>1</sup>	Grab
Nitrate (as N)	mg/L	Once <sup>1</sup>	Grab
Total Dissolved Solids	mg/L	Once <sup>1</sup>	Grab
<sup>1</sup> Once means July 2006			

# C. Ground Water Monitoring

The Permittee shall monitor the ground water in monitoring wells MW-1, MW-2, MW-3, MW-6, MW-8, MW-9, MW-10, MW-11, MW-12, and MW-13 according to the following schedule:

Parameter	Units	Sampling Frequency	Sample Type
Static water level elevation	Nearest 0.01ft above mean sea level	1/ month	Field Measurement
Temperature	°F	1/ month	Field Measurement
рН	s.u.	1/ month	Field Measurement
Total Dissolved Solids	mg/L	1/ month	Grab
TKN (as N)	mg/L	1/ month	Grab
NO <sub>3</sub> (as N)	mg/L	1/ month	Grab
NH <sub>4</sub> <sup>+</sup> (as N)	mg/L	4/ year <sup>1</sup>	Grab
Sodium	mg/L	1/ year <sup>2</sup>	Grab
Chloride	mg/L	1/ year <sup>2</sup>	Grab
Potassium	mg/L	1/ year <sup>2</sup>	Grab
Calcium	mg/L	1/ year <sup>2</sup>	Grab
Magnesium	mg/L	1/ year <sup>2</sup>	Grab
Sulfate	mg/L	1/ year <sup>2</sup>	Grab
Bicarbonate	mg/L	1/ year <sup>2</sup>	Grab

<sup>&</sup>lt;sup>1</sup> 4/year means: February, May, August, and November

<sup>&</sup>lt;sup>2</sup> 1/ year means July

## D. Soil Monitoring

The Permittee shall perform soil monitoring on each BAF treatment and alfalfa sprayfield, and fields IC7, 10, and 14 twice per year for TKN, nitrate, conductivity and pH, and once per year for the remaining parameters.

The sampling sites shall be located so as to be representative of each irrigation site or as represented in the crop management plan. If possible, sampling sites shall remain in the same vicinity from year to year. Testing at each sampling site shall be done on specified soil depth increments. Results shall be submitted annually with the annual Irrigation and Crop Management Plan.

Composite samples will be taken from the specified depths (or until auger refusal) and will be from a minimum of four (4) cores. Samples will be collected at a time that best represents soil conditions at the beginning and end of the crop growing season for the 2/year samples, and at the end of the growing season for the 1/year samples.

The Permittee shall monitor the soils in each of the fields according to the following schedule:

Parameter	Units	Sample Point	Depth Increments <sup>1</sup>
Organic matter	%	Each field	0.5, 1, 2, 4
Cation exchange capacity	meq/100g	Each field	0.5, 1, 2, 4
Ph	%	Each field	0.25 - 2
TKN (as N)	mg/Kg	Each field	0.25 - 2, 4, 6
Exchangeable sodium percentage	%	Each field	1 - 6
Total-P (as P)	mg/Kg	Each field	1 - 6
NO <sub>3</sub> (as N)	mg/Kg	Each field	1 - 6
Conductivity	mmhos/cm	Each field	1 - 6
Chloride	mg/Kg	Each field	1 - 6
Potassium	mg/Kg	Each field	1 - 6
Depth (inches) vs. Depth increment (ft 0 - 3" 0.25 3 - 6" 0.5 6 - 12" 1 12 - 24" 2	.) for composite samp	les:  24 - 36" 3 36 - 48" 4 48 - 60" 5 60 - 72" 6	

### E. Crop Monitoring

The Permittee shall perform monitoring for the grain/grass-type of crops (alfalfa; wheat; mint, etc.) for each crop grown, at least once per harvest. Composite samples will be comprised of samples collected from all fields relative to the crop type once per harvest with the exception of the alfalfa fields, which each field will be sampled once per harvest. Composite samples will be comprised of at least ten (10) random samples.

Values will be re	ported in the annua	l Irrigation and C	rop Management Plan.

Parameter	Units
Crop production	dry tons/ac
Moisture content	%
Total Nitrogen <sup>1</sup>	mg/Kg (dry wt)
Total Phosphorus (as P)	mg/Kg (dry wt)
Ash weight	mg/Kg (dry wt)
$^{1}$ TN = TKN + NO <sub>3</sub>	

## F. <u>Sampling and Analytical Procedures</u>

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Ground water sampling shall conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 1996).

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

### G. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

### H. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, conductivity, pH, and internal process control parameters are exempt from this requirement.

Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited.

Crops and soils testing have not been included in the accreditation program. Crops and soils data shall be provided by a reputable agricultural test lab that is an active participant in a nationally recognized agricultural laboratory proficiency testing program.

## S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

# A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department, and be received no later than the 25th day of the month following the completed reporting period, unless otherwise specified in this permit. The report shall be sent to:

Department of Ecology Water Quality Permit Coordinator 4601 N. Monroe St. Spokane, Washington 99205-1295

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge or the facility was not operating during a given monitoring period, submit the form as required with the words "No Discharge" entered in place of the monitoring results.

### B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

## C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

# D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2. of this permit, then the results of this monitoring shall be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

### E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

- 1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem;
- 2. Repeat sampling and analysis of any violation and submit the results to the Department within 30 days after becoming aware of the violation;
- 3. Immediately notify the Department of the failure to comply; and
- 4. Submit a detailed written report to the Department within thirty days, unless requested earlier by the Department, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the resampling, and any other pertinent information.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

### F. Maintaining a Copy of This Permit

A copy of this permit shall be kept at the facility and be made available upon request to Ecology inspectors.

### G. Soluble BOD report

The results from the soluble BOD testing of the irrigated wastewater in Section S2.A will be submitted in writing to Ecology no later than March 25, 2008. The report shall include all associated total BOD test values, and the values for the soluble BOD:total BOD ratio.

### **S4.** OPERATION AND MAINTENANCE

The Permittee shall at all times be responsible for the proper operation and maintenance of any facilities or systems of control installed to achieve compliance with the terms and conditions of the permit.

### A. Operations and Maintenance Manual

The O&M Manual shall be reviewed by the Permittee at least annually. All manual changes or updates shall be submitted to the Department whenever they are incorporated into the manual. The most current operation and maintenance manual shall be kept available at the permitted facility.

The operation and maintenance manual shall contain the treatment plant process control monitoring schedule. All operators shall follow the instructions and procedures of this manual.

In addition to the requirements of WAC 173-240-150(1) and (2), the manual shall include:

- 1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset, failure, or transmission pipe leak;
- 2. Irrigation system operational controls and procedures, including pumps and flow meters;
- 3. Wastewater system maintenance procedures;
- 4. A process control monitoring schedule
- 5. Sampling protocols for compliance with the testing and reporting requirements in the wastewater discharge permit

### B. Bypass Procedures

The Permittee shall immediately notify the Department of any spill, overflow, or bypass from any portion of the treatment system.

The bypass of wastes from any portion of the treatment system is prohibited unless one of the following conditions (1, 2, or 3) applies:

1. Unavoidable Bypass -- Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

If the resulting bypass from any portion of the treatment system results in noncompliance with this permit the Permittee shall notify the Department in accordance with condition S3.E "Noncompliance Notification."

- 2. Anticipated Bypass That Has the Potential to Violate Permit Limits or Conditions -- Bypass is authorized by an administrative order issued by the Department. The Permittee shall notify the Department at least 30 days before the planned date of bypass. The notice shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The Department will consider the following prior to issuing an administrative order:
  - a. If the bypass is necessary to perform construction or maintenancerelated activities essential to meet the requirements of the permit.
  - b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
  - c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

3. Bypass For Essential Maintenance Without the Potential to Cause Violation of Permit Limits or Conditions -- Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of the permit, or adversely impact public health as determined by the Department prior to the bypass.

# C. Irrigation Land Application

- 1. The system shall be operated so as to protect the existing and future beneficial uses of the ground water and not cause a violation of the ground water standards.
- 2. The leaching fraction from the sprayfield site shall not exceed 7.6% or 4.4 inches on an annual basis.
- 3. Gross annual nitrogen loading shall be limited to:

Alfalfa: 440 lbs/acre Winter wheat: 175 lbs/acre I/C fields: 150 lbs/acre

- 4. There shall be no runoff of wastewater applied to land by spray irrigation to any surface waters of the state or to any land not permitted for process wastewater application by the Permittee.
- The Permittee shall use recognized good practices, and all available and reasonable procedures to control odors from the land application system.
   When notified by the Department, the Permittee shall implement measures to reduce odors to a reasonable minimum.
- 6. The wastewater shall not be applied to the irrigation lands in quantities that:
  - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
  - b. Would cause long-term anaerobic conditions in the soil.
  - c. Would cause ponding of wastewater and produce objectionable odors or support insects or vectors.
  - d. Would cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the wastewater, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.
- 7. The Permittee shall maintain all irrigation agreements for lands not owned for the duration of the permit cycle. Any reduction in irrigation lands by termination of any irrigation agreements may result in permit modification or revocation. The Permittee shall immediately inform the Department in writing of any proposed changes to existing agreements.

### D. Best Management Practices

- 1. A viable and healthy cover crop shall be maintained on all fields that receive wastewater during the winter non-growing season.
- 2. Annual crops should be followed with deep-rooted alfalfa, wheat, or a perennial crop to maximize the uptake of residual soil nitrate.
- 3. Adjust irrigation plans during the winter to minimize percolate losses.
- 4. Adjust irrigation plans during high precipitation events to minimize percolate losses.
- 5. Use irrigation water and/or winter precipitation to meet the leaching requirement.
- 6. Operate each field so that the three year running average end-of-crop-year soil profile nitrate concentration is stable or declining.

7. Monitor soil profile water by neutron probe, or equivalent system, on representative fields for each crop, at least weekly.

### E. Flow Measurement – I/C Fields

No later than July 1, 2006, the Permittee shall notify Ecology, in writing, the selected method for measuring the total amount of supplemental water and wastewater applied to the I/C fields, and a time schedule for its installation and implementation.

#### S5. SOLID WASTE DISPOSAL

### A. Solid Waste Handling

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

### B. Leachate

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

### C. Solid Waste Control Plan

The Permittee shall submit all proposed revisions or modifications to the solid waste control plan to the Department. The Permittee shall comply with any plan modifications. The Permittee shall submit an update of the solid waste control plan with the application for permit renewal 180 days prior to the expiration date of the permit.

#### S6. SPILL PLAN - UPDATE

No later than January 25, 2007, the Permittee shall submit an update to the current spill plan. The Permittee shall review the plan annually thereafter and submit all revisions or modifications to the Department. The Permittee shall comply with any plan modifications. The Permittee shall submit an update of the spill plan with the application for permit renewal 180 days prior to the expiration date of the permit.

### S7. IRRIGATION AND CROP MANAGEMENT PLAN

An Irrigation and Crop Management Plan shall be submitted annually by April 1<sup>st</sup> for Department review. The plan shall generally conform with *Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems*, Ecology 1993. The plan must be prepared by a soil scientist. The plan shall include the following elements:

# A. Annual Summary of Farm Operations for All Fields for the Previous Year

This summary shall include:

- 1. For each crop grown, the total acreage and quantity harvested.
- 2. Calculated balances for nitrogen, salts, or other design limiting parameters for each BAF and I/C field. The calculations shall include:
  - a. crop consumptive use;
  - b. contributions from the process wastewater, supplemental water, and commercial fertilizers.

For crops that are less "grain/grass" like (i.e., non-forage crops) and have a large amount of vegetative growth (e.g., corn, potatoes), the use of literature values for nutrient uptake is acceptable. Otherwise, crop monitoring results shall be used in the balance determinations.

- 3. The total nitrogen loads to each field shall be compared to the discharge limitation in Section S1, and the values given in Section S4.C.
- 4. The total nitrogen and salt loads shall be compared to the estimated values presented in the previous year's Irrigation and Crop Management Plan.
- 5. Calculated water balance for each BAF and I/C field. The calculations shall include:
  - a. irrigation system efficiency and application uniformity;
  - b. the quantity of process wastewater, supplemental irrigation water, and precipitation;
  - c. crop consumptive use; and
  - d. salt leaching fraction for each field shall be compared to the leaching requirement in Section S4.C.
- 6. The wastewater hydraulic load to the site shall be compared to the discharge limitation in Section S1.
  - a. The total hydraulic load to each field shall be compared to the estimated values presented in the previous year's Irrigation and Crop Management Plan.
- 7. Petiole testing. A comparison will be made between the estimated fertilizer nitrogen requirements for each field, as presented in the previous year's ICM Plan, to the actual fertilizer nitrogen loads that were applied based on the petiole test results.

- 8. Soil testing results. A summary of the soil testing results shall be submitted and discussed as part of the annual Irrigation and Crop Management Plan.
  - a. At least a three-year running average end-of-crop-year soil profile nitrate concentration and conductivity for each field monitored for soil profile nitrate and conductivity shall be presented.
- 9. Crop testing results. A summary of the crop testing results shall be submitted and discussed.
- 10. Best Management Practices. The report shall include a narrative on meeting the BMPs listed in Section S4.D of this permit.
- 11. Irrigation Lands Operation and Maintenance. The report shall include a narrative on meeting the O&M requirements in Section S4.C of this permit.

# B. <u>Cropping Schedule for Upcoming Year</u>

This schedule shall include:

1. Crop Management. The proposed acreage for each crop, cultivation and harvesting requirements, expected crop yields, and methods for establishing a crop, and proposed schedule for herbicide, pesticide, and fertilizer application.

Estimated nitrogen and salt loads to each field based on the proposed crop rotation for the upcoming year.

Trends in the residual soil nitrogen for each field shall be considered when the crop schedule is determined.

2. Irrigation Management. Develop a water budget for each field based on the proposed crop that includes hydraulic loads from the wastewater, supplemental water, and precipitation. The frequency and timing of wastewater and supplemental irrigation water application (including harvest and non-harvest periods), and recommended rest cycles for wastewater application where organic or hydraulic loading is a concern.

The discussion of the proposed irrigation management shall include a salt budget and an estimation of planned leaching to control soil salinity for each field (i.e., leaching requirement), and the plan to meet the leaching requirement.

- 3. Fertilizer Management: An estimate will be made of the commercial fertilizer nitrogen requirements for each field.
  - a. A petiole testing plan will be described for each field for the coming year.

# S8. VADOSE ZONE MONITORING PLAN

A. No later than December 1, 2006, the Permittee shall submit to the Department for review and comment a plan for the installation of a vadose zone monitoring system for the entire sprayfield site.

The plan shall include: 1) a description of the type of system to be installed in a representative number of sprayfields in each sub-area; 2) the procedures for the installation; 3) operation and maintenance; 4) sample collection and preservation; 5) parameter test list; 6) testing schedule; 7) schedule for installation; 8) timeline for the beginning of sample collection.

### **GENERAL CONDITIONS**

# **G1. SIGNATORY REQUIREMENTS**

All applications, reports, or information submitted to the Department shall be signed as follows:

- A. All permit applications shall be signed by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by the person described above and is submitted to the Department at the time of authorization, and
  - 2. The authorization specifies either a named individual or any individual occupying a named position.
- C. Changes to authorization. If an authorization under paragraph B.2. above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

### **G2.** RIGHT OF ENTRY

Representatives of the Department shall have the right to enter at all reasonable times in or upon any property, public or private, for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times shall include normal business hours; hours during which production, treatment, or discharge occurs; or times when the Department suspects a violation requiring immediate inspection. Representatives of the Department shall be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

### **G3. PERMIT ACTIONS**

This permit shall be subject to modification, suspension, or termination, in whole or in part by the Department for any of the following causes:

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the state; or
- E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

The Department may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

### **G4.** REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports, whenever a new or increased discharge or change in the nature of the discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least 60 days prior to any proposed changes. Submission of this application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

### **G5.** PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications should be submitted at least 180 days prior to the planned start of construction. Facilities shall be constructed and operated in accordance with the approved plans.

### G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

### G7. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

### **G8. PERMIT TRANSFER**

This permit is automatically transferred to a new owner or operator if:

- A. A written agreement between the old and new owner or operator containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to the Department;
- B. A copy of the permit is provided to the new owner and;

C. The Department does not notify the Permittee of the need to modify the permit.

Unless this permit is automatically transferred according to section A. above, this permit may be transferred only if it is modified to identify the new Permittee and to incorporate such other requirements as determined necessary by the Department.

### **G9. PAYMENT OF FEES**

The Permittee shall submit payment of fees associated with this permit as assessed by the Department. The Department may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

### G10. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be and be deemed to be a separate and distinct violation.